**Treino P2**

Gabarito

Livro: networking\_basics

**Capítulo 10**

1. Which packet-switched connection method supports the highest bandwidth connections?

(a) X.25

(b) Frame relay

(c) ATM

(d) T service1

2. SONET optical carrier levels are measured in multiples of what speed?

(a) 16 Kbps

(b) 51.84 Mbps

(c) 45 Mbps

(d) 622.08 Mbps

3. Standard dial-up remote access connections use which of the following?

(a) POTS

(b) X.25

(c) ISDN

(d) T1

4. MS-CHAP is the most secure authentication protocol supported for Windows PPP clients. True or false?

False

5. What is the current Wi-Fi standard?

(a) 802.16e

(b) 802.11a

(c) 802.11b

(d) 802.11g

6. Secure remote access connections can be established over the Internet by using a VPN. True or false?

True

7. Which protocol is used for Windows client dial-in remote access to a Windows server?

(a) PPP

(b) SLIP

(c) PPTP

(d) L2TP

8. Which PPP subprotocol includes network-protocol specific support protocols that support network protocol configuration?

(a) LCP

(b) EAP

(c) NCP

(d) CCP

9. By classic definition, a LAN becomes a WAN when connections cross a public carrier. True or false?

True

10. What is the industry standard protocol for configuring VPN

connections?

(a) PPTP

(b) L2TP

(c) SLIP

(d) MPPE

**Capítulo 11**

1. Which of the following is an example of a strong password?

(a) dictionary

(b) bluegreen2

(c) cu&tin=bronze

(d) ahtraM

2. Which of the following could be used to detect someone trying to guess a user’s password?

(a) Account lockout

(b) Password history

(c) Password age

(d) Reversible password encryption

3. Which of the following encryption algorithms are used with WEP security?

(a) DES

(b) RC4

(c) RSA

(d) DHA

4. Which of the following refers to a network segment isolated for security reasons?

(a) WPA

(b) DES

(c) TKIP

(d) DMZ

5. Which of the following is a malicious application designed to monitor and record a user’s activity on a computer?

(a) Spyware

(b) Rootkit

(c) Worm

(d) Signature

6. A Trojan horse is a program that appears to be one thing but is actually another. True or false?

True

7. Unauthorized access is most often the result of an incursion by an individual from outside an organization. True or false?

False

8. Which of the following requires you to store passwords using reversible encryption?

(a) EAP

(b) CHAP

(c) MS-CHAPv2

(d) WPA

9. Ping of Death is an example of which of the following?

(a) Malware

(b) WinNuke attack

(c) DoS attack

(d) SYN flood

10. Which of the following might an attacker employ to make a DDoS attack harder to detect or block?

(a) IP spoofing

(b) Dynamic filtering

(c) WinNuke

(d) A DES algorithm

11. You can deploy publicly accessible computers within a network segment configured as a perimeter network. True or false?

True

12. You suspect that a device driver failed to initialize during system startup. Which Windows Event Log should you check?

(a) Application

(b) Security

(c) Directory service

(d) System

13. You want to limit traffi c into and out of your network to ports 80 and 443. What type of device should you deploy?

(a) Firewall

(b) NAT server

(c) Switch

(d) Bridge

14. Based on CERT surveys, what is the most prevalent risk to computers

deployed on a network that is connected to the Internet?

(a) Unauthorized access by employees

(b) Unauthorized access by outside attackers

(c) Virus infection

(d) Hidden spyware

15. A smart card is an example of a biometric device. True or false?

False

**Capítulo 12**

1. Windows XP automatic updates are an example of which of the following?

(a) ESD

(b) NMS

(c) SNMP

(d) NOC

2. For what purpose is an SNMP trap command used?

(a) To detect unauthorized agents.

(b) To remotely disable a managed device.

(c) To set device configuration parameters.

(d) To have a device send a notification in case of a failure.

3. RAID 5 is an example of which of the following?

(a) Automatic failover remote systems.

(b) Fault tolerant disk subsystem.

(c) Network monitoring device.

(d) Software distribution method.

4. A company’s LANs, WANs, and Internet websites can be managed separately without consideration for each other. True or false?

True

5. Which type of backup is used to back up changed data only, resetting the archive bit during the backup?

(a) Daily

(b) Normal

(c) Incremental

(d) Differential

6. Redundant systems with automatic failover are designed to enable the network to continue to provide a service without interruption and without direct human intervention. True or false?

True

7. For most day-to-day management tasks, it is more efficient to manage groups than to manage individual users. True or false?

True

8. Which of the following statements best describes a performance baseline?

(a) A performance baseline provides a starting point for evaluation.

(b) A performance baseline should be collected any time a problem is suspected.

(c) A performance baseline must be taken when the network is inactive with no users connected.

(d) A performance baseline should be taken only during peak use periods.

9. Which of the following could you use to capture network traffic for later analysis?

(a) An SNMP management console

(b) A network sniffer

(c) Windows System Monitor

(d) A remote control utility

10. A high percentage of frames detected with garbled data and other errors is usually an indication of what?

(a) An active Ethernet network

(b) An inefficient network protocol

(c) A failing network adapter

(d) Unauthorized network access

Livro: Network Fundamentals

**Capítulo 01**

1. Which of the following regenerates a signal and broadcasts that signal to every computer

connected to it?

a. Hub

b. Switch

c. Router

d. Firewall

2. Which of the following is not a central connecting device?

a. Hub

b. Switch

c. SOHO router

d. Windows 7 client

3. You need to install a network adapter to a computer so that it can be connected to a network that uses twisted-pair cabling. What type of port does the network adapter need to use?

a. RJ11

b. RJ45

c. RG-58

d. Fiber optic

4. Where can you go in Windows 7 to access the Properties of a network adapter?

a. Device Manager

b. Ping

c. Advanced Firewall

d. Task Manager

5. You need to connect a computer’s network adapter to a switch. You want the connection

to be able to send and receive data simultaneously. What type of connection do you need?

a. Half duplex

b. Full duplex

c. Simplex

d. 100 Mbps

6. You need to connect a computer at a rate of 100,000,000 bits per second. What speed

network adapter should you install?

a. 10 Mbps

b. 100 MB/s

c. 100 Mbps

d. 1000 Mbps

7. You need to connect to a router that has the IP address 192.168.1.100 on a standard,

default Class C network using the subnet mask 255.255.255.0. Which of the following

is a valid IP address for your network adapter?

a. 192.168.0.1

b. 192.168.1.1

c. 192.168.100.1

d. 192.168.1.100

8. You have just installed a network adapter and configured an IP address and subnet

mask. What command can you use to verify that the IP address is configured and listed

properly?

a. Ping

b. Tracert

c. CMD

d. Ipconfig

9. You need to ping your own computer to see if it is alive. Which of the following would

qualify as command-line syntax to do so?

a. Ping localclient

b. Ping 128.0.0.1

c. Ping loopback

d. Ping network adapter

10. You have been instructed to connect a computer to a group of hosts that have been

segmented from the regular network. What kind of network is this?

a. LAN

b. WLAN

c. WAN

d. VLAN

Fill the blank

Fill in the correct answer in the blank space provided.

1. The manager of IT asks you to connect a perimeter network to the firewall, which will

be separate from the LAN. This type of network is known as a DMZ.

2. A Star Topology can be defined by connecting several hubs to a switch.

3. 802.3u Ethernet networks run at 100 Mbps.

4. A Bit Torrent is a program used to download files quickly from a P2P network.28 | Lesson 1

5. The Token Ring network architecture is physically a star and logically a ring.

6. 802.3ab Ethernet networks run at 1000 Mbps.

7. A Half-duplex connection is one in which data can be both sent and received, but not

at the same time.

8. A Ring topology can be defined as connecting several computers together

in a circle without the use of a hub or a switch.

9. When several computers are connected in a small geographic area, it is known

as a LAN.

10. A WAP acts as a central connecting device and allows laptops, PDAs, and

handheld computers to communicate with each other.

**Capítulo 2**

1. How many layers are incorporated in the OSI model communications subnetwork?

a. 2

b. 7

c. 3

d. 4

2. Which of the following layers deals with the serial transfer of data?

a. Physical

b. Data link

c. Network

d. Session

3. You need to install a router on your company’s network that will allow access to the Internet. What layer of the OSI does this device reside on?

a. Physical

b. Data link

c. Network

d. Transport

4. You run a netstat –an command in the command prompt and notice many connections being made that say TCP in the left-most column. What layer of the OSI is TCP referring to?

a. Layer 1

b. Layer 2

c. Layer 3

d. Layer 4

5. You suspect a problem with your computer’s network adapter and its ability to send the

correct frames of data that correspond with the network architecture used by the rest

of your computers. What layer should you attempt to use as a troubleshooting starting

point?

a. Physical

b. Data link

c. Network

d. Transport

6. A standard such as 100BASE-T refers to which OSI layer?

a. Physical

b. Data link

c. Network

d. Transport

7. Almost all of your users connect to Web sites with Internet Explorer. They usually type

domain names such as www.microsoft.com. What protocol is initiated by default when

they press Enter after typing the domain name?

a. FTP

b. HTTPS

c. HTTP

d. HTP

8. You need to find out the MAC address of your director’s computer. He has given you

permission to access his computer. You access the command prompt. What command

should you type to see the computer’s MAC address?

a. ipconfig

b. ipconfig/all

c. arp

d. netstat -an

9. You need to find out the MAC addresses of all the computers that a particular user’s

computer has connected to in the recent past. What command should you use to accomplish this?

a. ping 127.0.0.1

b. netstat -a

c. arp -a

d. arp -s

10. You have been instructed to capture and analyze packets on a server. What tool will allow

you to do this? (Select the two best answers.)

a. Protocol analyzer

b. Command Prompt

c. netstat -an

d. Wireshark

Fill in the correct answer in the blank space provided.

1. The manager of IT asks you ping his laptop to see whether your computer can find it on

the network. In this scenario, the ICMS protocol is being implemented.

2. A layers 3 switch is one that uses logical addressing to determine data paths.

3. Ports 1024–49,151 are ports used by vendors for proprietary applications. They are

known as registered ports.

4. Port \_21 is used by the File Transfer Protocol.

5. Your manager wants you to allow HTTP and HTTPS connections to the company

web server. In order to do this, you need to open inbound ports 80 and 443.

6. Your company hosts a DNS server that resolves domain names to IP addresses. This

server must have 53\_ open to service those requests for name resolution.

7. You need to find out the Internet connections a particular computer has made in the

recent past. You also need to see numeric information so that you know the IP address

and port numbers of the destination computers. You should type the \_netstat -a

command in the command prompt.

8. The IT director asks you to connect a client computer to an 802.3ab network. This

network uses the Ethernet\_ standard.

9. A user has connected to a Web site. The information that is sent to that user’s computer

is encrypted in an encoded format. This change to the data occurs at the presentation

layer.

10. As you delve into a packet of data with your protocol analyzer, you notice that the frame

size is bigger than the packet size. This is because the packet is encapsuled inside the

frame.

**Capítulo 03**

1. You are in charge of installing 200 twisted-pair cable drops. What wiring standard

should you most likely use?

a. 568A

b. BOGB

c. 568B

d. 586B

2. Your boss wants you to connect two of his laptops directly to each other using their

network adapters. What kind of cable should you use?

a. Rolled cable

b. Crossover cable

c. Straight through cable

d. Patch cable

3. You are making a specialized wired connection for a server that will operate on an

Ethernet network. Which two wiring colors should you use?

a. Orange and green

b. Orange and blue

c. Orange and brown

d. White and blue

4. One of the network connections to a programmer’s computer has failed. You suspect it

involves a problem with the twisted-pair cable. What tool should you use to test for any

problems in the cable?

a. Patch tester

b. Wireshark

c. Continuity tester

d. Fox and hound

5. The IT director has asked you to connect three new super computers to the backbone of

a network that runs at 1 Gbps. The pressure is on! What type of cable will be sufficient

for this task?

a. Category 3

b. Category 5

c. Category 5e

d. Category 10a

6. Your network contains many fiber optic connections. Which one of the following does

not belong in your fiber network?

a. FC connector

b. ST connector

c. TOSLINK

d. 8P8C

7. You need to connect 802.11a, 802.11b, and 802.11n wireless networks together. What

wireless tool will guarantee you connectivity between these networks?

a. Wireless network adapter

b. Wireless hub

c. Wireless router

d. Wireless bridge

8. Your boss has asked you to connect three new laptops to the wireless network

“WLAN42.” It runs at a speed of 54 Mbps only and a frequency of 2.4 GHz only. What

IEEE 802.11 standard should you implement when connecting the laptops to the WAP?

a. 802.11a

b. 802.11b

c. 802.11g

d. 802.11n

9. You need to connect a desktop computer to a WLAN using the strongest encryption

type possible. Of the following choices, which is the strongest?

a. WEP

b. RADIUS

c. WPA2

d. WPA

10. You have connected thirteen PCs and laptops to a wireless network. To make your

WLAN more secure, what should you do to disallow additional client access to the WAP?

a. Enable channel bonding

b. Enable frame aggregation

c. Disable SSID broadcasting

d. Disable WPA2

Fill in the correct answer in the blank space provided.

1. The manager of IT asks you to connect a computer to an RJ45 jack. You should use a

Straight-through cable to do so.

2. A twisted-pair cable was run 140 meters without any repeaters. Now, the signal cannot

be picked up by the destination host. This cable is the victim of Attenuation

3. Your network uses category 3 cabling, but it needs to be upgraded so that it can support

faster 100 Mbps applications. In this situation, Category 5 would be the minimum

cable needed to accomplish this.

4. The type of cable known as Shielded Twisted Pair cable will protect the copper wires inside the cable from EMI.

5. Your boss complains about hearing a background conversation when he is talking on the

phone. This is an example of CrossTalk.

6. You need to connect LANs in two buildings in a campus area network. The buildings are

several kilometers apart. You would need Single Mode fiber optic cable to accomplish this.

7. Your boss doesn’t know exactly how to do it, but he knows that he wants port-based

authentication for his network. He is searching for a 802.1x implementation.

8. In order to connect to WLANs that are faster than 54 Gbps, you would need to utilize

the IEEE 802.11n standard.

9. The WPA2 wireless encryption mode can be as strong as 256-bit.

10. A Ad-hoc Network is when two or more wireless clients communicate directly with each

other, without the need for a WAP.

**Capítulo 04**

1. Your client requires that you install 284 computers on a single IP network. Which of the

following IP classes would be your best option?

a. Class A

b. Class B

c. Class C

d. Class D

2. Your boss wants you to set up three computers on a classful network with a default subnet mask of 255.0.0.0. What class does he want the computers to be set up on?

a. Class A

b. Class B

c. Class C

d. Class D

3. Proseware, Inc., needs you to set up 100 computers on a private Class A network. Which

of the following IP network numbers meet all of the criteria for a private Class A network?

a. 100.10.1.0

b. 192.168.1.0

c. 172.16.0.0

d. 10.0.0.0

4. You need to subnet a 192.168.1.0 network. You decide to use the 255.255.255.240 subnet mask. What is 240 equal to in binary?

a. 11100000

b. 11000000

c. 11110000

d. 10000000

5. The IT director has asked you to set up 14 separate IP networks that can each have up

to 400 computers. What IANA private IP range should you select?

a. 10.0.0.0–10.255.255.255

b. 172.16.0.0–172.31.255.255

c. 192.168.0.0–192.168.255.255

d. 169.254.0.0–169.254.255.255

6. You are troubleshooting a computer that cannot obtain the proper IP address from a

DHCP server. When you run an ipconfig/all, you see that the computer has obtained

the address 169.254.67.110 automatically. What has occurred? (Select the best answer.)

a. The DHCP server has auto-assigned an IP address to the computer.

b. APIPA has auto-assigned an IP address to the computer.

c. A SOHO router has auto-assigned an IP address to the computer.

d. The ISP has auto-assigned an IP address to the computer.

7. You need to connect 802.11a, 802.11b, and 802.11n wireless networks together. What

wireless tool will guarantee connectivity between these networks?

a. Wireless network adapter

b. Wireless hub

c. Wireless router

d. Wireless bridge

8. Your boss’s computer cannot connect to the Internet. Examine the following ipconfig

results and select the best answer explaining why this has occurred.

IPv4 Address ............................................. : 10.254.254.1

Subnet Mask.............................................. : 255.255.255.0

Default Gateway......................................... : 10.254.254.255

a. The subnet mask is incorrect.

b. The IP address is incorrect.

c. The default gateway is incorrect.

d. The subnet mask and the IP address are incorrect.

9. A user cannot connect to any Web sites. Review the ipconfig results that follow and

select the best answer explaining why this has occurred.

Windows IP Configuration

Host Name ........................................... : Computer1

Primary Dns Suffix ................................. :

Node Type ............................................ : Hybrid

IP Routing Enabled................................ : No

WINS Proxy Enabled............................... : No

Ethernet adapter lan:

Connection-specific DNS Suffix.:

Description........................................... : Intel(R)

82566DC-2 Gigabit Network Connection

Physical Address ................................... : 00-1C-C0-A1-55-16

DHCP Enabled ....................................... : No

Autoconfiguration Enabled ..................... : Yes

IPv4 Address ........................................ : 10.254.254.105(Preferred)

Subnet Mask ......................................... : 255.255.255.0

Default Gateway .................................... : 10.254.254.1

DNS Servers .......................................... : 10.255.254.1

a. The MAC address is incorrect.

b. The DNS server address is incorrect.

c. The default gateway address is incorrect.

d. The computer has no IP address.

10. You have installed a device that has two IP addresses. One address, 64.51.216.27, is

displayed to the Internet. The other address, 192.168.50.254, communicates with the

LAN. What type of technology have you implemented?

a. Subnetting

b. IPv6

c. Network address translation

d. Class A public IP address

Fill in the correct answer in the blank space provided.

1. The manager of IT asks you to subnet a group of computers on the 192.168.50.0/28

network. This will provide you with 16 number of subnets.

2. You have configured IP network 192.168.1.0 with the subnet mask 255.255.255.240.

Two computers have the IP addresses 192.168.1.113 and 192.168.1.114. Another

computer cannot communicate with them. That computer is using the IP address

192.168.1.145. Here, the third computer cannot communicate with the others because

it is on Subnet ID 9.

3. Your network uses the subnetted IP network 192.168.100.0/26. Its subnet mask

is 255.255.255.192.

4. You are troubleshooting an IP network with the following number: 10.254.254.0/24.

This type of IP network number is known as Classless Inter-Domain Routing.

5. Your boss worries about how many IPv4 addresses are left and inquires about installing

IPv6. Whereas IPv4 is a 32-bit system, IPv6 is a 128 -bit system.

6. A client wants you to set up a group of IPv6 network interfaces in such a way that

each of them will have all packets delivered to them. Here, you should implement

a Multicast address.

7. You are troubleshooting a server that needs to connect directly to the Internet. After

you run an ipconfig/all, you see that the server has been auto-assigned the IPv6 address

fe80::260:8ff:fec0:98d%4. The server won’t connect to the Internet due to the fact that

this is a Link-local address.

8. To save time when working with IPv6 addresses in the command line, you like to truncate them. The truncated version of 2001:4860:0000:2001:0000:0000:0000:0068 would

be 2001:4860:0:2001::68.

9. You see an IPv6 address displayed as fe80::5efe:10.0.0.2%2. This is an example

of IPv6 Tunneling.

10. You are troubleshooting a client’s network. The client is using the following IP network

scheme:

IP network: 192.168.50.0

Subnet mask: 255.255.255.240

The client has 196 computers that are functioning properly, but another 30 computers

will not connect to the network. This is because They have run out of adresses.

**Capítulo 5**

1. You are troubleshooting a network connectivity problem and see the command results

listed here. What command was typed to acquire these results?

Request timed out.

Request timed out.

Request timed out.

Request timed out.

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

a. ipconfig

b. netstat

c. ping

d. nbtstat

2. You are told to determine the MAC address of a Windows computer. Which command

should you use to find this information?

a. ipconfig

b. ipconfig /all

c. ipconfig /release

d. ipconfig /flushdns

3. Proseware, Inc., needs you to decipher the command results listed here. What command

was typed to acquire these results?

Active Connections

Proto Local Address Foreign Address State

TCP 0.0.0.0:80 0.0.0.0:0 LISTENING

TCP 0.0.0.0:135 0.0.0.0:0 LISTENING

TCP 0.0.0.0:445 0.0.0.0:0 LISTENING

TCP 10.254.254.205:139 0.0.0.0:0 LISTENING

TCP 127.0.0.1:2804 127.0.0.1:49159 ESTABLISHED

UDP 0.0.0.0:123 \*:\*

UDP 0.0.0.0:500 \*:\*

UDP 0.0.0.0:2190 \*:\*

UDP 0.0.0.0:3702 \*:\*

UDP 0.0.0.0:3702 \*:\*

UDP 0.0.0.0:4500 \*:\*

UDP 0.0.0.0:62038 \*:\*

UDP 10.254.254.205:137 \*:\*

UDP 10.254.254.205:138 \*:\*

a. netstat

b. nbtstat

c. netstat –an

d. nbtstat –an

4. A coworker asks for your help in analyzing the table shown here. What kind of table is this?

Network

Destination Netmask Gateway Interface

0.0.0.0 0.0.0.0 10.254.254.1 10.254.254.205

10.254.254.0 255.255.255.0 On-link 10.254.254.205

10.254.254.205 255.255.255.255 10.254.254.205

127.0.0.0 255.0.0.0 On-link 127.0.0.1

a. ARP table

b. DNS table

c. Local ARP table

d. Local routing table

5. The IT director has asked you to ping a computer continuously. Which of the following

is the best command to use?

a. ping -n

b. ping -t

c. ping -1

d. ping 127.0.0.1

6. You are troubleshooting a computer that cannot obtain the proper IP address from a

DHCP server. Of the following commands, which should you try first?

a. ipconfig /release

b. ipconfig /renew

c. ipconfig /displaydns

d. ipconfig /source=dhcp

7. You see the following results in the command prompt. What command did you just type?

Resolved By Broadcast = 0

Resolved By Name Server = 0

Registered By Broadcast = 9

Registered By Name Server = 0

a. nbtstat –r

b. nbtstat –RR

c. nbtstat –R

d. nbtstat –s

8. Your boss’s computer can ping other computers, but it cannot connect to Web sites.

Examine the following ipconfig results and select the best answer to explain why this has

occurred.

IPv4 Address. . . . . . . . . . . . . . . . . . . . . . . : 10.254.254.1

Subnet Mask . . . . . . . . . . . . . . . . . . . . . . . : 255.255.255.0

Default Gateway. . . . . . . . . . . . . . . . . . . . . : 10.254.254.255

DNS Servers. . . . . . . . . . . . . . . . . . . . . . . . : 127.0.0.1

a. The subnet mask is incorrect.

b. The IP address is incorrect.

c. The default gateway is incorrect.

d. The DNS server is incorrect.

9. A user cannot connect to the 192.168.1.0 network. Review the ipconfig results that follow and select the best answer to explain why this has occurred.

Windows IP Configuration

Host Name . . . . . . . . . . . . . . . . . . . . . . : Computer1

Primary Dns Suffix . . . . . . . . . . . . . . . . . :

Node Type. . . . . . . . . . . . . . . . . . . . . . . : Hybrid

IP Routing Enabled. . . . . . . . . . . . . . . . . : No

WINS Proxy Enabled . . . . . . . . . . . . . . . . : No

Ethernet adapter LAN:

Connection-specific DNS Suffix.:

Description . . . . . . . . . . . . . . . . . . . . . . : Intel(R)

82566DC-2 Gigabit Network Connection

Physical Address . . . . . . . . . . . . . . . . . . : 00-1C-C0-A1-55-16

DHCP Enabled . . . . . . . . . . . . . . . . . . . . : No

Autoconfiguration Enabled . . . . . . . . . . . : Yes

IPv4 Address . . . . . . . . . . . . . . . . . . . . . : 10.254.254.105(Preferred)

Subnet Mask . . . . . . . . . . . . . . . . . . . . . : 255.255.255.0

Default Gateway. . . . . . . . . . . . . . . . . . . : 10.254.254.1

DNS Servers. . . . . . . . . . . . . . . . . . . . . . : 10.255.254.1

a. The MAC address is incorrect.

b. The DNS server address is incorrect.

c. The default gateway address is incorrect.

d. The IP address is incorrect.

10. You are troubleshooting a network connectivity problem and see the command results

listed here. What command was typed to acquire these results?

1 15 ms 19 ms 19 ms 10.21.80.1

2 12 ms 22 ms 12 ms 208.59.252.1

3 152 ms 216 ms 149 ms 207.172.15.38

4 14 ms 24 ms 37 ms 207.172.19.222

5 21 ms 16 ms 25 ms 207.172.19.103

6 17 ms 23 ms 30 ms 207.172.9.126

7 15 ms 14 ms 15 ms 72.14.238.232

8 15 ms 35 ms 18 ms 209.85.241.148

9 30 ms 23 ms 44 ms 66.249.91.104

a. ipconfig

b. netstat

c. tracert

d. pathping

Fill in the correct answer in the blank space provided.

1. The manager of IT asks you to explain to her what command issued the following

results:

Reply from 10.254.254.1: bytes=32 time=1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

Reply from 10.254.254.1: bytes=32 time<1ms TTL=64

The command typed was ping -10 <IP>.

2. A coworker cannot finish troubleshooting a computer before the end of the day. Before

leaving, your coworker tells you the following results took over three minutes to acquire,

and he asks you not to delete them from his screen:

Tracing route to google.com [66.249.91.104]

over a maximum of 30 hops:

0 Desktop-Lamp1 [10.254.254.205]

1 bdl1.eas-ubr16.atw-eas.pa.cable.rcn.net [10.21.80.1]

2 vl4.aggr1.phdl.pa.rcn.net [208.59.252.1]

3 tge1-1.core3.phdl.pa.rcn.net [207.172.15.38]

4 tge2-4.core1.nyw.ny.rcn.net [207.172.19.222]

5 tge1-1.border1.nyw.ny.rcn.net [207.172.19.103]

6 207.172.9.126

7 72.14.238.232

8 209.85.241.148

9 lga15s02-in-f104.1e100.net [66.249.91.104]

Computing statistics for 225 seconds . . .

Source to Here This Node/Link

Hop RTT Lost/Sent = Pct Lost/Sent = Pct Address

0 Desktop-Lamp1

[10.254.254.205]

0/ 100 = 0% |

1 14ms 0/ 100 = 0% 0/ 100 = 0% bdl1.eas-ubr16.atw-eas.pa.cable.rcn.net [10.21.80.1]

0/ 100 = 0% |

2 25ms 0/ 100 = 0% 0/ 100 = 0% vl4.aggr1.phdl.pa.rcn.net

[208.59.252.1]

0/ 100 = 0% |

3 33ms 0/ 100 = 0% 0/ 100 = 0% tge1-1.core3.phdl.pa.rcn.

net [207.172.15.38]

0/ 100 = 0% |

4 38ms 0/ 100 = 0% 0/ 100 = 0% tge2-4.core1.nyw.ny.rcn.net [207.172.19.222]

0/ 100 = 0% |

5 32ms 0/ 100 = 0% 0/ 100 = 0% tge1-1.border1.nyw.ny.rcn.net [207.172.19.103]

0/ 100 = 0% |

6 21ms 0/ 100 = 0% 0/ 100 = 0% 207.172.9.126

0/ 100 = 0% |

7 23ms 0/ 100 = 0% 0/ 100 = 0% 72.14.238.232

0/ 100 = 0% |

8 22ms 0/ 100 = 0% 0/ 100 = 0%

The command that was typed to produce these results is pathping.

3. You need to add the IP address 192.168.1.1 to the network adapter via the command

line. It also needs to have a gateway address of 192.168.1.100. The command you

should type is ipconfig.

4. You are troubleshooting a computer that is making strange connections to the Internet

on its own. The ipconfig /displaydns command will show you the network sessions to various

computers on the Internet.

5. Your boss wants you to download some manuals from an FTP site. He wants you to do so

via the command line. The ftp -i [IP] command will allow you to accomplish this goal.

6. A coworker has determined the IP address of a domain name as shown in the following results:

DNS request timed out.

timeout was 2 seconds.

Server: UnKnown

Address: 10.254.254.1

Non-authoritative answer:

Name: google.com

Address: 66.249.91.104

Your coworker typed the tracert command to acquire these results.

7. You are troubleshooting a server and decide to refresh the NetBIOS names. You type a

command that yields the following results:

The NetBIOS names registered by this computer have been refreshed.

You typed the nbstat command.

8. You are simulating network traffic to a remote host. Examine the following results of a

TCP/IP command:

Reply from 10.254.254.1: bytes=1500 time=2ms TTL=64

Reply from 10.254.254.1: bytes=1500 time<1ms TTL=64

Reply from 10.254.254.1: bytes=1500 time<1ms TTL=64

Reply from 10.254.254.1: bytes=1500 time<1ms TTL=64

Ping statistics for 10.254.254.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 2ms, Average = 0ms

The exact command that was issued was ping.

9. You are told by your boss to empty the DNS cache of a computer and reconnect to the

nearest DNS server. You need to type the ipconfig /flushdns and ipconfig /displaydns commands.

10. You are troubleshooting a client’s network. The client is using the following IP network

scheme:

IP network: 10.254.254.0

Subnet mask: 255.255.255.0

The client cannot access the 10.253.253.0 network. You go to the server that is also

acting as the router between the two networks and type a command. You see the

following results:

Network

Destination Netmask Gateway Interface

0.0.0.0 0.0.0.0 10.254.254.1 10.254.254.205

10.254.254.0 255.255.255.0 On-link 10.254.254.205

10.254.254.205 255.255.255.255 10.254.254.205

127.0.0.0 255.0.0.0 On-link 127.0.0.1

You typed the nbstat command. The reason the client cannot access the

10.253.253.0 network is because \_\_\_\_\_\_\_\_\_\_\_\_.

**Capítulo 6**

1. Your Windows client failed to broadcast to all servers that it has accepted an IP address

offer. What step is this in the four-step DORA process?

a. Discovery

b. Offering

c. Request

d. Acknowledge

2. You are in charge of setting up a DHCP server to hand out IP addresses and other IPrelated information. Which of the following cannot be obtained from a DHCP server?

a. IP address

b. MAC address

c. DNS server address

d. Gateway address

3. Proseware, Inc., wants you to scan servers for DHCP activity. Which ports should you

be looking for?

a. 53 and 54

b. 80 and 443

c. 20 and 21

d. 67 and 68

4. A coworker asks for your help in analyzing a problem with a DHCP server. The server’s

scope has been created and the IP range appears to be valid, yet no clients are obtaining

IP addresses. What could be the reason for this? (Select the best answer.)

a. The server was not authorized.

b. The scope was not activated.

c. The scope was not authorized.

d. The server is down.

5. The IT director has asked you set up a computer to acquire an IP address from a newly

configured DHCP server. Which of the following is the best command to use?

a. ping -n

b. ipconfig /renew

c. ipconfig /release

d. ping -renew

6. You are troubleshooting a computer that cannot obtain the proper IP address from a

DHCP server. When you run ipconfig, the address 169.254.25.53 shows up in the

results. What service is assigning the IP address to the client?

a. DHCP

b. WINS

c. APIPA

d. DNS

7. You have just scanned the ports of your server and see that port 3389 is open. What can

you deduce from this?

a. The WINS service is running.

b. The DNS service is running.

c. Terminal Services is running.

d. RRAS is running.

8. Your boss asks you to take control of a server remotely from within the GUI of the client

OS. What is the proper tool to use?

a. Remote Desktop

b. Telnet

c. FTP

d. SSH

9. You have been asked by a client to install a VPN server. Which of the following services

should be chosen in order to accomplish this?

a. DNS

b. RRAS

c. WINS

d. IPsec

10. Which protocol generates encryption and authentication keys that are used by IPsec?

a. ESP

b. AH

c. SA

d. IPv6

Fill in the correct answer in the blank space provided.

1. The DNS service resolves host names to IP addresses.

2. The WINS service resolves NetBIOS names to IP addresses.

3. The DISCOVERY step in the DORA four-step process is when a client broadcasts out

to the network in order to find a DHCP server.

4. When renewing a DHCP assigned IP address, usually 2(dois) steps of the DORA process are involved.

5. To install the DHCP service on a Windows Server 2008 computer, you would use the

adm tools section of the Server Manager.

6. By default, wired DHCP leases last for 6(seis) days.

7. The ipconfig /release and ipconfig /renew commands are useful when troubleshooting a

client that is having difficulty obtaining an IP address from a DHCP server.

8. A client that has obtained an IP address of 169.254.10.175 is getting the IP address from APIPA.

9. RDS enables clients to connect to and take control of a server.

10. VPN networks take the place of direct dial-up connections by using the inherent power of the Internet.

**Capítulo 7**

1. You have been hired to install several routing protocols to a group of routers. Which one

of the following is not an example of a dynamic routing protocol?

a. RIP

b. IGRP

c. RRAS

d. OSPF

2. You need to install the latest version of RIP on Windows Server 2008. Which version

should you select?

a. Version 1

b. Version 2

c. Version 3

d. RIP does not have multiple versions

3. Proseware, Inc., has hired you to install a PAD (router) that will enable a packet

switched connection to the Internet. Which of the following is an example of packet

switching technology?

a. T1

b. Frame Relay

c. 802.1X

d. ATM

4. A coworker asks for your help installing a NAT server. What is the best tool to use for

this?

a. DNS

b. RIP

c. ATM

d. RRAS

5. The IT director has asked you to install a new demarc device. What is he referring to?

(Select the best answer.)

a. A router

b. A CSU/DSU

c. A switch

d. A server

6. You have been asked to troubleshoot a wide area networking technology that has a maximum data transfer rate of 64 Kbps. What technology will you be troubleshooting?

a. Frame Relay

b. ATM

c. X.25

d. SONET

7. The manager of IT has instructed you to install a PAD. To which of the following devices

is a PAD most similar?

a. Hub

b. Switch

c. Router

d. CSU/DSU

8. Your boss asks you to have the organization’s ISP install a T1 line. What is the total

speed or throughput of that line?

a. 1.536 Mbps

b. 1.544 Mbps

c. 1.5 Mbps

d. 15.35 Mbps

9. A customer wants to install an ISDN line for video conferencing. Which of the following

should you install?

a. BRI

b. ATM

c. PRI

d. OC3

10. A small business wants to ensure that its DSL Internet connection uploads and downloads the same amount of information per second. Which type of DSL should you

install?

a. xDSL

b. ADSL

c. SDSL

d. DSL Lite

Fill in the correct answer in the blank space provided.

1. You must install a routing protocol that monitors the network for routers that have

changed their link state. The OSPF protocol will allow you to accomplish

this.

2. The BGB is a protocol that bases routing decisions on the network path and

rules.

3. To enable dynamic routing, you have been instructed to install RIPv2. You should install

this in the RRAS snap-in.

4. A customer requires a high-speed packet switching alternative to X.25. In this situation,

you should install Frame Relay.

5. X.25 connections utilize a clocking circuit. This makes them Synchronous.

6. You are analyzing Frame Relay frames and find that a message consisting of ten

separate packets was sent over five different circuits. These five circuits together form a

Virtual circuit.

7. Your company just purchased a leased line that runs the Frame Relay service. The standard data rate for this service is known as Committed information Rate (CIR).

8. A client wishes to upgrade her remote users from dial-up to a faster service. However,

cable Internet and DSL are not available in the users’ respective areas. Another valid

alternative is to use ISDN.

9. A customer wants a WAN technology that does not use variable length packets but

instead uses fixed length cells. You should recommend ATM.

10. A client with eight computers needs a cost-effective Internet solution that can transmit

128 Kbps. You should recommend BRI.

**Capítulo 8**

1. You have been tasked to set up an authentication server on a DMZ that will allow only

users from a partner company. What kind of network are you configuring?

a. Internet

b. Intranet

c. Extranet

d. World Wide Web

2. You are in charge of setting up a VPN that allows connections on inbound port 1723.

What tunneling protocol are you going to use?

a. PPTP

b. PPP

c. L2TP

d. TCP/IP

3. Proseware, Inc., wants you to set up a VPN server. What service in Windows Server 2008

should you use?

a. FTP

b. DNS

c. RRAS

d. IIS

4. The IT director has asked you to install a firewall. Which of the following is not a type

of firewall?

a. NAT filtering

b. DMZ

c. ALG

d. Stateful packet inspection

5. You suspect an issue with one of the ports on the firewall. You decide to scan the ports.

Which of the following is the appropriate tool to use?

a. PPTP

b. Protocol analyzer

c. NMAP

d. NIDS

6. Your client wants a server that can cache web pages in order to increase the speed of

commonly accessed Web sites. What type of server does the client require?

a. Proxy

b. DNS

c. Firewall

d. VPN

7. The customer you are working for wants a device that can detect network anomalies and

report them to an administrator. What type of device is the customer looking for?

a. Internet content filter

b. Proxy server

c. WINS server

d. NIDS

8. Your boss asks you to set up an area that is not on the LAN but not quite on the

Internet. This area will house servers that will serve requests to users who are connecting

to your intranet. What type of zone does your boss want you to set up?

a. DMZ

b. Extranet

c. FTP

d. VPN

9. You have been asked by a client to install a VPN server that can offer unencrypted

tunnels by default, or encrypted tunnels by using IPSec. Which of the following services

should you choose in order to accomplish this?

a. DNS

b. L2TP

c. WINS

d. IPsec

10. You have set up a default VPN in Windows Server 2008. However, your boss is not

happy with the level of security. She would rather have L2TP combined with IPsec.

What tunneling protocol is running currently on the server?

a. RRAS

b. L2TP without IPsec

c. PPTP

d. VPNv2

Fill in the correct answer in the blank space provided.

1. web 2.0 allows users to interact with each other and contribute to Web sites.

2. The Internet Engineering Task Force (IETF) defines DNS.

3. The World Wide Web (WWW) is an enormous system of interlinked hypertext documents.

4. You have set up a network zone that allows remote access for employees of your

company. This is known as a Intranet.

5. You install a VPN server that uses inbound port 1701. The server is utilizing

the L2TP protocol.

6. You installed a VPN server and configured a VPN adapter on a client computer.

However, the connection cannot be completed from the client to the server. This is

because you skipped the Configure Users step.

7. The VPN server has been configured and is running properly. However, it has not been

configured to hand out IP addresses to clients. When a VPN server is configured this

way, the clients obtain their IP addresses from a DHCP server.

8. A firewall normally has a private and a Public IP address.

9. You have installed a firewall that accepts or rejects packets based on a set of rules. This

firewall keeps track of the state of the network connection. It is running a type of packet

filtering known as stateful packet filtering.

10. You have configured a firewall so that all ports are closed. Now you are attempting to

scan the firewall’s ports to verify that there are no open ones. You should use the

P0 (-Pn in 5.4 and later, circa 2009) option within the Nmap port scanning program.